

## ABSTRACT

A method and arrangement in connection with an inverter that comprises several power semiconductor components and a control apparatus arranged to control them is disclosed. The method comprises the steps of determining the temperature or an electric quantity affecting the temperature of one or more power semiconductor components, determining the change of the temperature or an electric quantity affecting the temperature of one or more power semiconductor components, and controlling with the control apparatus the power semiconductor components in response to both a control quantity to generate an output voltage and the change rate of the temperature or a quantity affecting the temperature of the power semiconductor components to reduce temperature variation by slowing down the temperature increase rate as the temperature or quantity affecting the temperature increases and by slowing down the temperature decrease rate as the temperature or quantity affecting the temperature decreases.